

**Before the  
Federal Communications Commission  
Washington, D.C.**

In the Matter of:	)	
	)	
Revision of the Commission's Rules To	)	CC Docket No. 94-102
Ensure Compatibility with Enhanced 911	)	
Emergency Calling Systems	)	

**NTELOS INC. WAIVER REQUEST**

NTELOS Inc., hereby requests a limited waiver of Section 20.18 of the Commission's Rules to allow the delay of the phase-in of its deployment of a network-assisted handset-based solution technology in meeting the Commission's requirements for implementing E911 Phase II service.

**Company Information**

This waiver request is submitted by NTELOS Inc. f/k/a CFW Communications Company, on behalf of its subsidiary NTELOS Wireless Inc. f/k/a CFW Wireless Inc., TRS 807074. NTELOS Wireless Inc. is the managing partner of Virginia PCS Alliance, TRS 816030; Virginia RSA6 Cellular Limited Partnership, TRS 807081; and West Virginia PCS Alliance, TRS 818784.

**E911 Phase II Location Technology Information**

NTELOS has made a decision to use a network-assisted handset-based solution for its E911 location technology. NTELOS has determined that the handsets to support this technology will not be available until 2002. NTELOS respectfully requests a waiver of the handset distribution timeframes. NTELOS will continue to upgrade its network to support the Network-Assisted Handset-Based Solution (A-GPS) with completion to coincide with the availability of GPS enabled handsets.

NTELOS investigated several network-based solutions and found that the rural nature of much of NTELOS' network would pose a challenge to all network-based solutions. NTELOS also found that network-based solutions would pose an unreasonable cost to its customers.

NTELOS has reviewed several handset options and has found that the network-assisted handset-based solution provides the most precise and reliable accuracy in both urban and rural markets. NTELOS found the commitment of Qualcomm, the licensee of CDMA technology, clearly establishes GPS-1 by SnapTrack as the best choice to provide location accuracy both inside and outside of NTELOS' network. SnapTrack has been able to demonstrate accuracy to within five meters in an open sky environment. SnapTrack has also been able to demonstrate the ability to meet the FCC accuracy mandate in urban areas, which pose the greatest challenge for handset solutions. The three largest CDMA carriers in the United States announced that they will also be deploying the same solution. NTELOS' choice of the network-assisted GPS solution will best serve its customers as they roam into other CDMA carriers' networks, and when those carriers' customers roam into NTELOS' network. This unified decision by CDMA carriers will also accelerate production and ultimately reduce cost to all CDMA customers. The integration of this solution into upcoming versions of the Qualcomm chipset will give NTELOS the best opportunity to achieve our goal of 95% penetration into the NTELOS' imbedded base.

### **Network Integration Timeline**

NTELOS plans to integrate its Lucent wireless switches to the necessary software release to support SnapTrack Assisted GPS solution in the 2<sup>nd</sup> Quarter 2002 with the exception of the Lucent switch deployed in Charleston, WV. The Charleston, WV switch will be replaced with a Nortel switch in the 1<sup>st</sup> half of 2002. NTELOS plans to complete cell site calibration and integration with our service bureau that will provide the network component of our solution in the 3<sup>rd</sup> Quarter 2002 in all markets served by Lucent Switches.

NTELOS is scheduled to install Nortel switches in 2<sup>nd</sup> Quarter 2002. These switches will support the proper switch load, have cell sites calibrated and be integrated with our service bureau by September 30, 2002.

### **Handset Availability and Proposed Timeline**

NTELOS has reviewed production roadmaps for all of its handset vendors. Some have not provided A-GPS enabled handset timelines at all. Three have indicated that they will begin introducing their A-GPS equipment throughout 2002. One vendor has indicated that they will introduce a mid-priced handset during the 2<sup>nd</sup> Quarter of 2002, with the other higher priced handsets to following throughout 2002. The other two vendors have

indicated that they will be introducing the A-GPS feature on high-end handsets during the 2<sup>nd</sup> and 3<sup>rd</sup> Quarters 2002 with plans to continue to introduce the feature throughout their product line by the end of 2002. Experience has shown that handset vendors prioritize large carriers ahead of small to mid-sized carriers such as NTELOS. As a result, NTELOS may not be able to offer A-GPS handsets until after the initial product introduction by handset vendors. Handset price could be a deciding factor in reaching the desired penetration schedules. NTELOS anticipates that the market will continue to respond to the adoption of the A-GPS solution by the country's largest CDMA carrier. The short-term results of this announcement will be difficult to anticipate because they will affect both the supply and demand for A-GPS handsets. NTELOS believes that this product will ultimately provide the best solution in terms of universal availability and cost to NTELOS' customers.

Customer demand for the GPS enabled phones will also be difficult to gauge. NTELOS recognizes that there is tremendous safety benefit to the Phase II 911 location services. Currently, fewer than half of the PSAPs within NTELOS' network support wireless E-911 Phase I. NTELOS will continue to work to support the timely deployment of wireless E-911 throughout its network. Until the PSAPs within the NTELOS network are able to more universally receive enhanced 911 service, NTELOS will not be able to aggressively market emergency location as a value-added handset feature.

NTELOS proposes the following handset deployment schedule:

Begin selling GPS enabled handsets between April 1, 2002 and September 1, 2002.

Sell 25% GPS enabled handsets between January 1, 2003 and July 1, 2003

Sell 50% GPS enabled handsets between July 1, 2003 and January 1, 2004

Sell 100% GPS enabled handsets between January 1, 2004 and July 1, 2004

Achieve 95% penetration of embedded base by July 1, 2006.

## **Conclusion**

NTELOS is fully committed to public safety and the Commission's desire for all consumers to have access to valuable 9-1-1 services. To reach that result, and after much investigation of many Phase II solutions, it is NTELOS' belief that the deployment of a network-assisted handset-based solution is the best option. Because of the inability of any handset vendor to meet market demand by the October 1, 2001 deadline, NTELOS has no option but to request a limited waiver from the Commission's Rules.

NTELOS will continue to work with its Phase II providers to deploy the necessary network (hardware and software) components, throughout 2001 and the first three-quarters of 2002, to support the A-GPS solution. NTELOS will continue to request that

our vendors accelerate their introduction of the A-GPS capabilities and to integrate this technology into their products as soon as possible. It is NTELOS' goal to have 95% penetration of its embedded base by July 1, 2006.

Respectfully submitted,

NTELOS Inc.

Mary McDermott  
Senior Vice President -  
Legal and Regulatory Affairs  
401 Spring Lane Plaza  
Waynesboro, VA 22980  
540-946-8677  
email: [mcdermottm@ntelos.com](mailto:mcdermottm@ntelos.com)

Contact Person:  
Bob Layman  
E911 Coordinator  
1154 Shenandoah Village Drive  
Waynesboro, VA 22980  
540-941-4290  
email at [laymanr@ntelos.com](mailto:laymanr@ntelos.com).

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